Bruce Elliott is the chief of the Water Quality Management Branch of the Environmental Protection Agency, Dallas Regional Office. He has been with the EPA since 1970. Elliott received a B.S. in Civil Engineering from Texas Tech.



EPA PROGRAMS AND PERSPECTIVES

Bruce Elliott Environmental Protection Agency 1145 Ross Avenue Dallas, Texas 75202-2733

INTRODUCTION

It is my pleasure to be here today to discuss some of the ongoing water programs at the Environmental Protection Agency (EPA). Over the last two years, EPA has focused their water quality program as directed by Congress when the Clean Water Act (CWA) was amended in 1987. In addition, the Safe Drinking Water Act Amendments of 1986 are causing considerable, rapid changes in the Drinking Water Program. Congress not only gave EPA and the states a tremendous amount of work, they also set a very ambitious schedule for completion. I will briefly outline these directions and then discuss some of the implications to water quality in New Mexico.

Two of the 1987 directives deal specifically with water quality problem identification and the requirements to implement controls to restore and maintain the quality of our rivers, streams, and reservoirs. The first is Section 319, which addresses nonpoint source pollution control and the second is Section 314, which addresses restoration of impaired publicly owned lakes.

Nonpoint Sources

Section 319 of the 1987 amendments addressing nonpoint source pollution (NPS) required each state to prepare an Assessment Report and Management Program. Each state was required to complete their assessments no later than August 1988. Briefly, the NPS Assessment Report was to include the following:

- A list of waters, which without additional action to control nonpoint source pollution, cannot be reasonably expected to attain or maintain the water quality standards or the goals of the act
- 2. The types (or categories) of nonpoint sources affecting the waters
- 3. The process the state will use to identify Best Management Practices (BMP) in each category
- 4. The existing state and local programs that assist in nonpoint source pollution control

The amendments required states to use available information from a variety of sources and to use an open assessment process that would allow participation from all those with an interest and expertise in water quality. Secondly, Section 319 required

states to develop a nonpoint pollution management program.

The management program was to include the following:

- The Best Management Practices to be used to reduce nonpoint source pollution from each category of pollution
- 2. The state and federal programs that will be used to implement the Best Management Practices statewide and in targeted watersheds
- 3. A schedule of annual milestones for implementing Best Management Practices
- 4. A certification by the state's attorney general assuring that state law provides adequate authority to implement the management program or a schedule to seek such authority if it is lacking
- 5. State and federal funding sources to be used to implement this program
- 6. A list of federal projects that will be reviewed for conformance with the state program

An annual progress report to Congress by EPA is required with a final report on the progress made in reducing pollution due on 1 January 1990.

New Mexico submitted both an Assessment Report and a Management Program. Both have been approved. The New Mexico Assessment Report identified over 1,200 of the state's 3,500 river miles and 120,800 of 126,500 public lake acres as being affected by nonpoint source pollution. Also, over 50 percent of the 883 known ground-water contamination cases are identified as being caused by nonpoint sources. The state worked with a multiagency task force and the public to develop the Management Program. The Management Program relies heavily on the cooperation of many agencies for its successful implementation. It contains more than 100 milestones to be met by thirteen different agencies at the state, federal, and local levels. It also contains four cooperative watershed treatment projects for nonpoint source control.

One major challenge facing states over the next year will be program implementation. It will require active support and participation by all thirteen agencies as well as private entities.

Clean Lakes

Section 314 of the CWA Amendments reauthorizes the National Clean Lakes Program that was begun in 1976. The program provides financial assistance to the states for the restoration and protection of publicly owned lakes. Reauthorization of the program added several important requirements including a Lake Water Quality Assessment Report including a revised lake classification report, a list of lakes known not to meet water quality standards or require controls to maintain standards, and a status and trend assessment of lake water quality. This list of threatened and impaired lakes was submitted as part of the state's biennial water quality report.

Over the past year, New Mexico has received two grants for their lake water quality program. One grant will assist the state in assessing and classifying lakes and another is the first phase of a study on the best restoration alternative for McGaffey Lake.

A common element of the two grant programs is the requirement to list and target those waters most severely impacted or at highest risk. As you can see, the states and EPA have had a full agenda over the last two years related to nonpoint sources and lakes. Given the number of agencies and parties involved, increased coordination and program integration of all federal and state programs are essential.

Indian Tribes

A few words about provisions of the 1987 Clean Water Act Amendments dealing with Indian tribes may be of interest. Indians were provided additional water quality management opportunities under Section 518 of the amended Clean Water Act. This topic is of particular interest to New Mexico with its 22 federally recognized tribes occupying land in the state. Section 518 provides the opportunity for Indian tribes to be treated as states for water quality management purposes.

In 1990, the priority for Indian tribes should be the development and adoption of water quality standards. Standards are the cornerstone of any water quality program.

When adopting water quality standards, Indian tribes would be subject to the same requirements as states. States are required to review their standards at least every three years and hold public hearings to provide the public with an opportunity to comment on proposed standards. Every three years, states must review any waterbody with standards not consistent with the fishable/swimmable goals. This is done to determine if new information has become available that warrants a revision of the standard.

In reviewing and adopting water quality standards, it is important to ensure consistency with both upstream and downstream standards. EPA will be establishing a process to resolve any conflicts or incompatibilities with adjacent stream standards. Tribes are to submit the new or revised water quality standards and supporting documentation to EPA for review and approval.

Standards Criteria

While on the subject of standards, I would also like briefly to give you an idea of New Mexico's achievements in the standards program. The state of New Mexico's most recent triennial revisions to water quality standards were adopted by the New Mexico Water Quality Control Commission 8 March 1988 and approved by EPA Region 6 on 31 May 1988.

No numeric criteria for priority pollutants were adopted in the 1988 revisions. However, the state has been making progress in complying with the requirement in Section 303(c)(2)(B) of the Clean Water Act. This section requires states to adopt numeric criteria for all priority pollutants for which criteria have been published, if the discharge or presence in the affected waters could be reasonably expected to interfere with designated uses. Numeric criteria refer to both criteria protective of aquatic life and criteria protective of human health. New Mexico, while complying with one of the requirements of the Clean Water Act to identify and list segments with toxicity problems, has been identifying priority pollutants requiring adoption of numeric criteria. The state will submit a draft of the revised standards by June 1990.

Ground Water

In reviewing this conference's agenda, considerable time has been scheduled for discussion of ground water. I believe that is both timely and appropriate. Another top priority at EPA is groundwater protection. On a national scale, protecting ground water involves addressing about 1,500 hazardous waste land disposal facilities; 1,194 Superfund sites, ten of which are in New Mexico; thousands of nonhazardous waste disposal facilities; hundreds of thousands of injection wells; over a million underground tanks; about 23 million residential septic systems; and the use of millions of pounds of pesticides and millions of tons of fertilizers. The potentially regulated community encompasses not only a few large industries and businesses, but also small businesses, individual homeowners, and farmers.

We recognize that, in New Mexico, pollution of shallow ground water has the potential to contaminate private drinking water wells. The environmentally sensitive river valleys and floodplains, which often contain shallow aquifers, are also the most densely populated areas in New Mexico. Among the five states covered by our regional office,

(Louisiana, Arkansas, Oklahoma, Texas, and New Mexico), New Mexico is of particular interest to us with regard to ground water because much of the area's geology renders the limited ground-water supplies vulnerable to contamination.

Approximately 87 percent of the population in New Mexico depends on ground water for drinking water and it is the only source of water in many parts of the state. Compare this to approximately 50 percent in Arkansas, 69 percent in Louisiana, 41 percent in Oklahoma, and 47 percent in Texas, and it is easy to understand the importance of ground water in New Mexico.

New Mexico took the initiative to protect ground-water resources a decade ago when the New Mexico Water Quality Control Commission adopted a comprehensive set of state ground-water protection regulations. New Mexico's regulatory program for the protection of ground-water quality is well established, workable, and effective. The ground-water laws of some sixteen states reflect New Mexico's influence. In general, I believe the state has done a good job to date on ground water, and deservedly serves as a model for other states.

Wellhead Protection Program

The 1986 Amendments to the Safe Drinking Water Act also established a new program to protect ground water supplying public drinking water wells and wellfields, called the Wellhead Protection Program.

Specifically, the safe Drinking Water Act required each state to develop and submit a wellhead protection program by 19 June 1989. The program was to be designed to protect wellhead areas from contaminants that may have adverse effects on human health.

New Mexico met the statutory deadline and submitted its Wellhead Protection Program to EPA for review and approval. The proposed New Mexico program established a 1000 foot radius around each public water supply well. Detailed contaminant inventories will be conducted in this area and contaminant sources identified will be subject to the applicable federal or state regulations.

Drinking Water

The last EPA water program I will mention today is our drinking water program. EPA is midway in the process of drafting regulations requiring drinking water to be more closely monitored and more thoroughly treated. The regulations will require that the public be notified sooner when

problems are discovered. The major requirements of Safe Drinking Water Act Amendments include:

- The original list of 25 primary drinking water contaminants is to be expanded to 83. The final list of 83 contaminants will include organic and inorganic chemicals, microbiological contaminants, and radionuclides.
- EPA was required to publish a priority list of drinking water contaminants by January 1988.
 We are further required to regulate 25 of these contaminants at three year intervals beginning in 1991.
- The amendments also require EPA to develop regulations specifying criteria for filtration and disinfection of surface water and disinfection of ground water. The regulations for surface water were published in June 1989. However, the regulations for disinfection of ground water are probably several years away.
- 4. Monitoring for "unregulated contaminants" means that we are not proposing a maximum contaminant level for a given contaminant, but rather, we are establishing only a monitoring requirement. A decision will be made later, based on data gathered, as to whether each contaminant should be regulated. This monitoring is required or has been proposed for almost 200 contaminants to date.
- 5. Another new concept included in recent drinking water regulations is that of "vulnerability assessment." In several sets of regulations, the states are given discretion to require a system to monitor for a list of contaminants only if the system is judged "vulnerable" to those contaminants. Examples are pesticides, PCBs and asbestos. Criteria used to assess vulnerability can include previous monitoring results, use of a particular chemical/contaminant in the area, amount of protection of the source, and the mobility of the contaminant. We hope that through efficient use of the "vulnerability" concept, states will be able to target monitoring and save resources.
- Monitoring for organic contaminants in ground water is a very important activity in New Mexico. The initial round of monitoring under the Volatile Organic Chemical (VOC) regulations, which included all water systems serving 10,000 or more people, found VOCs at a higher rate than was found in the other four states in Region 6. This may be reflective of larger systems being more dependent on ground water in New Mexico than in other states or it may actually indicate that more ground-water con-

- tamination is occurring here. We will get a better indication once sampling among the smaller systems is complete. Although more contaminated wells were found in New Mexico than other Region 6 states, the rate is still well below the national average.
- 7. The Drinking Water Section within the state's Environmental Improvement Division has done a good job of implementing the requirements passed by EPA. The section has received approval to implement a fee system to raise funds to supplement the federal grant funds dedicated to the drinking water program. If successfully implemented, this system should go a long way toward supporting the New Mexico Drinking Water Program through the coming expansion period.

I believe we have been busily striving to restore and maintain the physical, chemical, and biological integrity of our nation's waters as stated in the Clean Water Act. The programs I have discussed briefly today are just a few of EPA's water programs that are implementing the goals of the Clean Water Act and the Safe Drinking Act. I thank you for the opportunity to mention these programs and encourage you to call us if you have more specific questions.